IN THE CLAIMS

1-16. (Canceled)

17. (Currently Amended) A method for making a ferroelectric memory transistor, the method comprising:

forming a silicon-oxide layer over a desired channel region of a silicon substrate[[;]],

wherein forming the silicon-oxide layer comprises:

establishing a chamber temperature of approximately 400 degrees Celsius; and

generating oxygen atoms in a Krypton plasma;

forming a doped titanium-oxide layer over the silicon-oxide layer; and

forming a doped zinc-oxide layer on the titanium-oxide layer.

18. (Original) The method of claim 17 wherein forming the doped titanium-oxide layer over the silicon-oxide layer comprises:

using atomic-layer deposition to form a strontium- or barium-doped titanium-oxide layer.

19. (Original) The method of claim 17 wherein forming the doped titanium-oxide layer over the silicon-oxide layer comprises:

using atomic-layer deposition to form a strontium- or barium-titanate layer.

20. (Original) The method of claim 18, wherein using atomic-layer deposition comprises:

establishing an ambient pressure of about 10 mbar within a deposition chamber containing the silicon-oxide layer;

establishing an ambient temperature between 250 and 325 degrees Celsius within the deposition chamber;

alternately introducing a strontium or barium precursor and a titanium-oxide precursor into the deposition chamber, with the strontium or barium precursor and the titanium-oxide precursors introduced at rates to saturate reactions of the

precursors at a surface of the silicon-oxide layer; and

introducing water vapor into the deposition chamber concurrent with the introduction of the strontium or barium precursor and concurrent with the introduction of the titanium-oxide precursors.

21. (Currently Amended) The method of claim 19, wherein the strontium or barium precursors ~~consists~~ consist essentially of cyclopentadienyl compounds.

22. (Currently Amended) The method of claim 19, wherein the strontium or barium precursors ~~consists~~ consist essentially of $Sr(C_5\text{-}I\text{-}Pr_3H_2)_2$ or $Ba(C_5Me_5)_2$.

23. (Original) The method of claim 20, further comprising:

purging the deposition chamber with nitrogen gas between alternate introductions of the strontium or barium precursors and the titanium-oxide precursors.

24. (Original) The method of claim 17 wherein forming the doped zinc-oxide layer comprises:

providing a composite mass comprising zinc oxide and particles of lithium or magnesium; and

magnetron sputtering matter from the composite mass onto the titanium-oxide layer.

25. (Original) The method of claim 17 wherein forming the doped zinc-oxide layer comprises:

jet-vapor deposition of zinc oxide, (lithium carbonate), and magnesium oxide on the titanium-oxide layer.

26. (Original) The method of claim 17 wherein forming the doped zinc-oxide layer comprises:

chemical-vapor deposition of zinc-oxide on the titanium-oxide layer.

27. (Original) A method for making a ferroelectric memory transistor, the method comprising:

forming a silicon-oxide layer over a desired channel region of a silicon substrate;

forming a doped titanium-oxide layer over the silicon-oxide layer, wherein forming the doped titanium-oxide layer comprises

establishing an ambient pressure of about 10 mbar within a deposition chamber containing the silicon-oxide layer;

establishing an ambient temperature between 250 and 325 degrees Celsius within the deposition chamber;

alternately introducing a dopant precursor and a titanium-oxide precursor into the deposition chamber; and

introducing water vapor into the deposition chamber concurrent with the introduction of the strontium or barium precursor and concurrent with the introduction of the titanium-oxide precursors; and

forming a doped zinc-oxide layer on the doped titanium-oxide layer.

28. (Original) The method of claim 27 wherein the dopant precursor includes strontium or barium.

29. (Original) A method for making a ferroelectric memory transistor, the method comprising:

forming a silicon-oxide layer over a desired channel region of a silicon substrate;

forming a doped titanium-oxide layer over the silicon-oxide layer; and

forming a doped zinc-oxide layer on the titanium-oxide layer, wherein forming the doped zinc-oxide layer comprises:

providing a composite mass comprising zinc oxide and particles of lithium or magnesium; and

magnetron sputtering matter from the composite mass onto the titanium-oxide layer.

30. (Original) A method for making a ferroelectric memory transistor, the method comprising:

forming a silicon-oxide layer over a desired channel region of a silicon substrate;

forming a doped titanium-oxide layer over the silicon-oxide layer; and

forming a doped zinc-oxide layer on the titanium-oxide layer, wherein forming the doped zinc-oxide layer comprises:

jet-vapor deposition of zinc oxide in combination with lithium carbonate or magnesium oxide on the titanium-oxide layer.

31. (Original) A method for making a ferroelectric memory transistor, the method comprising:

forming a silicon-oxide layer over a desired channel region of a silicon substrate, wherein forming the silicon-oxide layer comprises:

establishing a chamber temperature of approximately 400 degrees Celsius;

generating oxygen atoms in a Krypton plasma;

forming a doped titanium-oxide layer over the silicon-oxide layer, wherein forming the doped titanium-oxide layer comprises:

establishing an ambient pressure of about 10 mbar within a deposition chamber containing the silicon-oxide layer;

establishing an ambient temperature between 250 and 325 degrees Celsius within the deposition chamber;

alternately introducing a dopant precursor and a titanium-oxide precursor into the deposition chamber; and

introducing water vapor into the deposition chamber concurrent with the introduction of the strontium or barium precursor and concurrent with the introduction of the titanium-oxide precursors; and

forming a doped zinc-oxide layer on the titanium-oxide layer, wherein forming the doped zinc-oxide layer comprises:

providing a composite mass comprising zinc oxide and particles of lithium or magnesium; and

magnetron sputtering matter from the composite mass onto the titanium-oxide layer.

32-42. (Canceled)